

## Contents

<i>List of Contributors</i>	page ix
<i>Preface</i>	xi
1 Shipping, Ships and the Environment	1
THOMAS VANCE, TIMOTHY FILEMAN AND STEPHEN DE MORA	
2 Atmospheric Emissions from Ships	11
THOMAS G. BELL, MINGXI YANG AND SIMON J. USSHER	
3 Oil Pollution from Operations and Shipwrecks	56
ROGER C. PRINCE	
4 Waste and Sewage	75
C. MICHAEL HALL	
5 Ballast Water	96
STEPHAN GOLLASCH AND MATEJ DAVID	
6 Biocides from Marine Coatings	112
SAMANTHA ESLAVA MARTINS, ISABEL OLIVEIRA, KATHERINE LANGFORD AND KEVIN THOMAS	
7 Invasive Species	165
JOHN A. LEWIS	
8 Physical Effects of Ships on the Environment	216
TIMOTHY FILEMAN, STEPHEN DE MORA AND THOMAS VANCE	

viii	<i>Contents</i>	
9	Ship Noise SALVATORE VIOLA AND VIRGINIA SCIACCA	225
10	Vessel Strikes and North Atlantic Right Whales CAROLINE H. FOX AND CHRISTOPHER T. TAGGART	250
11	Nuclear-Powered Vessels RICHARD JOHN (JAN) PENTREATH	282
12	Environmental Impacts of Shipbreaking M. MARUF HOSSAIN	303
13	International Legislative Framework GORANA JELIC MRCELIC, NIKOLA MANDIC AND RANKA PETRINOVIC	329
14	Shipping Industry's Perspective PETER HINCHLIFFE	352
15	Environmental Impacts of Shipping: Can We Learn? STEPHEN DE MORA, TIMOTHY FILEMAN AND THOMAS VANCE	367
	<i>Index</i>	374